

Title (en)

METHOD FOR PRODUCING HIGH PURITY TEREPHTHALIC ACID

Title (de)

VERFAHREN ZUR HERSTELLUNG HOCHREINER TEREPHTHALSÄURE

Title (fr)

PROCEDE SERVANT A PREPARER UN ACIDE TEREPHTALIQUE EXTREMEMENT PUR

Publication

EP 1669343 A4 20070103 (EN)

Application

EP 04773646 A 20040930

Priority

- JP 2004014772 W 20040930
- JP 2003344002 A 20031002

Abstract (en)

[origin: EP1669343A1] In the process for producing a high-purity terephthalic acid of the invention, a slurry of crude terephthalic acid crystals dispersed in an acetic acid solvent, which is produced by a liquid-phase oxidation of p-alkylbenzene in the acetic acid solvent, is continuously converted into a slurry in water by a mother liquor displacement and then subjected to a catalytic hydrogenation. The acetic acid solvent slurry is introduced into a column equipped with a central shaft having a plurality of stirring blades along a vertical direction thereof from an upper portion of the column. The crude terephthalic acid crystals are allowed to sediment to form a high-concentration zone of terephthalic acid crystals in the column. A displacing water is fed into the column from a bottom portion thereof so as to form an upward flow of water in the column while forming circular flows in the high-concentration zone by rotation of the stirring blades, thereby bringing the terephthalic acid crystals into counter-current contact with the upward flow of water. The terephthalic acid crystals after counter-current contact with the upward flow of water is discharged from a bottom portion of the column together with the displacing water, while simultaneously taking the acetic acid solvent out of a portion of the column disposed above a feed portion for introducing the acetic acid solvent slurry. By the process, the acetic acid solvent of the acetic acid slurry is displaced by water in a high degree of mother liquor displacement.

IPC 8 full level

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CPC (source: EP KR US)

C07C 51/47 (2013.01 - EP US); **C07C 51/487** (2013.01 - EP KR US); **Y02P 20/52** (2015.11 - EP US)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2005033058A1

Cited by

EA024560B1; EP1669140A4; WO2012001390A1; WO2011145424A1; WO2011108420A1; US9120737B2; US7655097B2; WO2005032736A1

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